



# **Painted Desert Trail**

# Imperial National Wildlife Refuge

Length: 1.3 miles

Difficulty: Average

(moderate short climbs and uneven terrain)

## **Hiking in the Desert**

Wear sunscreen and carry plenty of water. The Sonoran Desert can be dangerously hot and dry.

Watch out for wildlife, avoid disturbing rattlesnakes, scorpions, tarantulas, and spiders by being careful when walking, and not reaching under vegetation or into cracks and crevices.

Be alert for flash floods. Rain falling in one area can cause flooding in another. When hiking in washes, be aware that conditions may change rapidly.

Imagine traveling miles in the hot, dry sun to quench your thirst. Or, imagine wrapping yourself in plastic to protect from dehydration. As you meander through rocky washes and over variegated mesas left behind by ancient volcanoes, discover how desert critters and plants have adapted to this arid environment.

#### Stop 1

Although this portion of the Sonoran Desert appears barren and dry, it sustains a diversity of plants and animals. The tall shrub at this stop is a creosote bush. Cup your hands around its leaves and gently breathe warm air onto them. Then inhale the "rainy" smell that comes from sticky resin coating its leaves like a raincoat to protect against water loss.

As you continue along this wash created by racing waters using it for a riverbed in times of torrential rain, how many colors can you identify in the rocks?

## Stop 2

Twenty to thirty million years ago, volcanic eruptions of viscous, hot lava and ash dominated this region and created the landscape you see today. Named for the multicolored mounds that surround you, the Painted Desert Trail is comprised of rocks tinted by minerals. Iron creates the rusty color, for example, while copper appears green.

Identify a nearby desert ironwood tree by its twisted grey trunk and spiny branches. Its tiny leaflets offer little surface for evaporation, protecting the tree from water loss. Because the desert ironwood never drops all of its leaves at once, a canopy remains throughout the year to protect wildlife from heat. And as you might wear a hat to shield against the sun, a soft covering of hair protects desert ironwood leaves from damaging ultraviolet rays.

As you walk, look for signs of erosion caused by water.

### Stop 3

This natural column of rock, called a hoodoo, was created by water eroding from several directions. Can you see the confluence of two washes coming together below the hoodoo? The force of water erosion has carved and sculptured this land.

If you are lucky, you might detect a sideblotched lizard peeking from a crevice in a rock wall. During the heat of day, most animals seek protection and are rarely seen. Scales covering the lizard and other reptiles help retain moisture in their bodies.

## Stop 4

Look into the distance to locate a strip of blue flanked by green vegetation. The Colorado River is quite a distance from the Painted Desert Trail, and wildlife needing a drink must travel this expanse to satisfy their thirst. It's to their advantage, then, to adapt to hot, dry conditions to avoid making the trip too often.

Some wildlife obtain all the water they need from the plants or animals that they eat. During winter, when plants have absorbed more moisture, the desert bighorn sheep might go for months

without needing to drink water, relying instead on dew and moist vegetation. But imagine gulping two gallons of water in just a few minutes! That's what desert bighorns do when they trek to the distant river every two or three days during summer months and drink up to 20 percent of their body weight to store in their enlarged stomachs. Eating cactus fruits and barrel cactus in between these trips also helps keep them hydrated.

### Stop 5

As you step around large droppings on the soft, sandy dirt, look for tracks that appear as small hoof prints. Miners who came to this area in the late 1800s brought burros to carry their gear and help with the work. When a miner died, his burro often wandered into the desert and adapted to the harsh conditions by eating many of the same plants as native species. Can you see burro trails crisscrossing the terrain? Look on the ground for indentations that are burro dusting holes.

#### Stop 6

What's a good name for a green tree? The paloverde, Spanish for "green stick," is easily identified by its green stems and bark. Look closely at the tall green tree nearby. To conserve water, the paloverde drops its tiny leaves during dry spells. But leaves of the paloverde, even if present, are so small that they cannot carry on photosynthesis without assistance. Whether or not it is leafed out, the paloverde relies on its green stems and branches to achieve this energy-producing process.

We hope you adapted well to your hike through the Painted Desert today. If you wish to recycle this leaflet, please return it to the rack at the trailhead.

### **For Additional Information**

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http://www.fws.gov/southwest/refuges/arizona/imperial.html

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